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EXAMINER

TERPAA, JI

ART UNIT

PAPER NUMBER

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
08/717,042

Applicant(s)
Palley et al.

Examiner
Niki M. Elishway

Group Art Unit
3727



☒ Responsive to communication(s) filed on Dec 10, 1998

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-66 is/are pending in the application.

Of the above, claim(s) 12, 48-50, and 54-66 is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-11, 13-47, and 51-53 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 4

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Election/Restriction

1. Claims 12, 48-50 and 54-66 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b) as being drawn to a non-elected species. Election was made **without** traverse in Paper No. 11.

Claim Rejections - 35 USC § 112

2. Claims 32-47 and 51-53 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. In claims 32, 33 and 47, applicant has not disclosed that each band forms a sleeve which encloses a space. This omission results in an incomplete description of the container.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Morrison (U.S. 3,093,259). Morrison teaches a collapsible container capable of withstanding blasts of certain magnitudes. The inner walls 9 and the foamed plastic 8 are considered the blast mitigating materials within the container.

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Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Galber and MacDonald et al.

6. Claims 1, 2, 8, 10, 11, 13, 15, 19, 33 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Galber (U.S. 4,915,291) in view of MacDonald et al. (U.S. 3,822,807). Galber discloses the claimed invention except for the blast mitigating material. MacDonald et al. teach that it is known to provide a container with foam. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the container of Galber with the foam of MacDonald et al., in order to prevent a rise in pressure within the container. The material of the Galber container is considered fibrous.

7. Claims 3-6, 16-18, 20-28, 30, 35-43 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Galber in view of MacDonald et al., as applied to claims 1, 2, 15 and 33 above, and further in view of Prevorsek et al. (U.S. 5,545,455). The modified container of Galber discloses the claimed device except for the band material. Prevorsek et al. disclose that it is known in the art to make a container from layers comprising networks of fibers. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the modified container of Galber with the fibrous material of Prevorsek et al., in order to make a container with improved penetration resistance.

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The fibers of Prevorsek et al. are considered to be "substantially continuous" in length (see col. 8 ln. 17-45 of Prevorsek et al.). Prevorsek et al. disclose that the fibers have a tenacity of at least 15 grams/denier and a tensile modulus of at least 300 grams/denier (see col. 7 ln. 14-22). In col. 7 ln. 62 - col. 8 ln. 16, Prevorsek et al. teach that aramid fibers and glass fibers may be used to form the fibrous layers, and in col. 7 ln. 10-11 Prevorsek et al. disclose that polyolefin fibers may be used in the fibrous layer. The claimed matrix is disclosed in col. 8 ln. 17 - col. 9 ln. 38 of Prevorsek et al., in particular on line 3 of col. 9, a polyurethane matrix is disclosed.

The modified container of Galber does not specifically disclose the specific percent of the fibers which are considered to "substantially continuous". It would have been obvious to one having ordinary skill in the art at the time the invention was made to make a certain percent of the fibers substantially continuous depending on the what strength and rigidity is desirable for the container and, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Galber and Gettle et al.

8. Claims 1, 2, 9, 33 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Galber in view of Gettle et al. Galber discloses the claimed invention except for the blast mitigating material. Gettle et al. teach that it is known to provide a container with aqueous foam (see line 11 of the Abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the container of Galber with the aqueous foam of Gettle et al., in order to attenuate pressure waves. The material of the Galber container is considered fibrous.

9. Claims 3, 4, 7, 20, 23, 27, 29, 31, 35, 38, 42 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Galber in view of Gettle et al., as applied to claims 1, 2 and 33 above, and further

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in view of Prevorsek et al. The modified container of Galber discloses the claimed device except for the band material. Prevorsek et al. disclose that it is known in the art to make a container from layers comprising networks of fibers. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the modified container of Galber with the fibrous material of Prevorsek et al., in order to make a container with improved penetration resistance.

The fibers of Prevorsek et al. are considered to be "substantially continuous" in length (see col. 8 ln. 17-45 of Prevorsek et al.). Prevorsek et al. disclose that the fibers have a tenacity of at least 15 grams/denier and a tensile modulus of at least 300 grams/denier (see col. 7 ln. 14-22). In col. 7 ln. 62 - col. 8 ln. 16, Prevorsek et al. teach that aramid fibers and glass fibers may be used to form the fibrous layers, and in col. 7 ln. 10-11 Prevorsek et al. disclose that polyolefin fibers may be used in the fibrous layer. The claimed matrix is disclosed in col. 8 ln. 17 - col. 9 ln. 38 of Prevorsek et al., in particular on line 3 of col. 9, a polyurethane matrix is disclosed.

The modified container of Galber does not specifically disclose the specific percent of the fibers which are considered to "substantially continuous". It would have been obvious to one having ordinary skill in the art at the time the invention was made to make a certain percent of the fibers substantially continuous depending on the what strength and rigidity is desirable for the container and, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Lewis and MacDonald et al.

10. Claims 1, 10, 11, 14, 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lewis (U.S. 0,674,009) in view of MacDonald et al. Lewis discloses the claimed invention except for the blast mitigating material. MacDonald et al. teach that it is known to provide a container with foam. It

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would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the container of Lewis with the foam of MacDonald et al., in order to prevent a rise in pressure within the container.

Prevorsek et al., Lewis and MacDonald

11. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Prevorsek et al. in view of Lewis and Gettle et al. Prevorsek et al. do not disclose the specific shape of the container and the aqueous foam, but Prevorsek et al. do teach the use of two or more reinforcing bands arranged at varying angles (see col. 10 lines 48-56). Lewis teaches that it is known to provide a container made of three bands having perpendicular longitudinal axes (see figure 1). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the reinforcing bands of Prevorsek et al. to structure a container as taught by Lewis, in order to form a container with increased strength.

Gettle et al. teach that it is known to provide a container with foam. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the container of Prevorsek et al. with the foam of Gettle et al., in order to attenuate pressure waves.

Regarding the density of the aqueous foam, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the foam of Gettle et al. with a density between 0.01 and 0.10 g/cm³, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Galber, MacDonald et al. and Prevorsek et al.

12. Claims 47, 51 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Galber in view of MacDonald et al. and Prevorsek et al. Galber discloses the claimed invention except for the blast

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mitigating material. MacDonald et al. teach that it is known to provide a container with foam. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the container of Galber with the aqueous foam of MacDonald et al., in order to prevent the rise of pressure within the container. The material of the Galber container is considered fibrous.

The modified container of Galber discloses the claimed device except for the band material. Prevorsek et al. disclose that it is known in the art to make a container from layers comprising networks of fibers. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the modified container of Galber with the fibrous material of Prevorsek et al., in order to make a container with improved penetration resistance.

The fibers of Prevorsek et al. are considered to be "substantially continuous" in length (see col. 8 ln. 17-45 of Prevorsek et al.). Prevorsek et al. disclose that the fibers have a tenacity of at least 15 grams/denier and a tensile modulus of at least 300 grams/denier (see col. 7 ln. 14-22). In col. 7 ln. 62 - col. 8 ln. 16, Prevorsek et al. teach that aramid fibers and glass fibers may be used to form the fibrous layers, and in col. 7 ln. 10-11 Prevorsek et al. disclose that polyolefin fibers may be used in the fibrous layer. The claimed matrix is disclosed in col. 8 ln. 17 - col. 9 ln. 38 of Prevorsek et al., in particular on line 3 of col. 9, a polyurethane matrix is disclosed.

The modified container of Galber does not specifically disclose the specific percent of the fibers which are considered to "substantially continuous". It would have been obvious to one having ordinary skill in the art at the time the invention was made to make a certain percent of the fibers substantially continuous depending on the what strength and rigidity is desirable for the container and, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

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Galber, Gettle et al. and Prevorsek et al.

13. Claims 47 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Galber in view of Gettle et al. and Prevorsek et al. Galber discloses the claimed invention except for the blast mitigating material. Gettle et al. teach that it is known to provide a container with aqueous foam (see line 11 of the Abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the container of Galber with the aqueous foam of Gettle et al., in order to attenuate pressure waves. The material of the Galber container is considered fibrous.

The modified container of Galber discloses the claimed device except for the band material. Prevorsek et al. disclose that it is known in the art to make a container from layers comprising networks of fibers. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the modified container of Galber with the fibrous material of Prevorsek et al., in order to make a container with improved penetration resistance.

The fibers of Prevorsek et al. are considered to be "substantially continuous" in length (see col. 8 ln. 17-45 of Prevorsek et al.). Prevorsek et al. disclose that the fibers have a tenacity of at least 15 grams/denier and a tensile modulus of at least 300 grams/denier (see col. 7 ln. 14-22). In col. 7 ln. 62 - col. 8 ln. 16, Prevorsek et al. teach that aramid fibers and glass fibers may be used to form the fibrous layers, and in col. 7 ln. 10-11 Prevorsek et al. disclose that polyolefin fibers may be used in the fibrous layer. The claimed matrix is disclosed in col. 8 ln. 17 - col. 9 ln. 38 of Prevorsek et al., in particular on line 3 of col. 9, a polyurethane matrix is disclosed.

The modified container of Galber does not specifically disclose the specific percent of the fibers which are considered to "substantially continuous". It would have been obvious to one having ordinary skill in the art at the time the invention was made to make a certain percent of the fibers substantially continuous

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depending on the what strength and rigidity is desirable for the container and, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Response to Arguments

14. Applicant's arguments filed December 10, 1998 have been fully considered but they are not persuasive. Regarding the blast resistance of the Lewis and Galber containers, these containers are considered blast resistant to the degree set forth in the claims because they are capable of withstanding blasts of certain magnitudes.

Conclusion

15. In view of the new grounds of rejection, this action is made Non-Final.

16. In order to reduce pendency and avoid potential delays, Group 3720 is encouraging FAXing of responses to Office Actions directly into the Group at (703)305-3579. This practice may be used for filing papers not requiring a fee. It may also be used for filing papers which require a fee by applicants who authorize charges to a PTO deposit account. Please identify the examiner and art unit at the top of your cover sheet. Papers submitted via FAX into group 3720 will be promptly forwarded to the examiner.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Niki M. Eloshway whose telephone number is (703) 308-1606. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-1148.



Niki M. Eloshway/nme
Patent Examiner
March 1, 1999



Stephen Castellano
Primary Examiner